

2 2 FEB 1994

Michael J. Schumacher
Brinefield Projects Manager
Akzo Salt, Inc.
Abington Executive Park
P.O. Box 352
Clarks Summit, Pennsylvania 18411-0352

Dear Mr. Schumacher:

The U.S. Environmental Protection Agency (EPA) has reviewed Akzo Salt's request to have its Underground Injection Control Permit NYU063860 modified to allow the injection of a maximum of 30,000 gallons of No. 2 fuel oil into brine wells, for the purpose of controlling cavern growth, at Akzo's solution salt mining facility in Watkins Glen, New York. Akzo has requested this modification for Well # 58 and for any properly constructed wells drilled in the future.

EPA has reviewed the facts and considered the precautions proposed to be implemented by Akzo to prevent contamination of the environment by fuel oil. Based on the information provided, EPA does not believe the proposed safeguards are adequate. EPA is concerned that Seneca Lake may be endangered by Akzo's request and proposal. Akzo's past experience of fuel oil contamination of the lake and EPA's mandates to protect the waters of the United States and public water systems require effective measures to protect Seneca Lake. Therefore, EPA cannot grant the requested permit modification until the following concerns are addressed:

1. Although Akzo plans to build a concrete containment structure around Well # 58 to hold oil that might spill during transfer from a truck to the well, that containment structure was not designed to contain oil that might be released from the wellhead under pressure due to a leak during operation. This deficiency is acknowledged on page 4 of the Spill Prevention, Control and Countermeasure (SPCC) Plan: "Due to the working pressure of the well, all oil released from this type of failure may not be contained

within the secondary containment system. Spilled oil could flow overland into two drainage swales which ultimately drain into Seneca Lake." On page 10 of the SPCC plan it is stated that "An annulus leak may result in a release both inside and outside the secondary containment system. A spill outside the secondary containment would require prompt response to contain the spill." EPA is concerned that a leak in the wellhead equipment would not be contained within this secondary containment, which would allow oil to adversely impact ground water and/or flow into Seneca Lake, as occurred in February 1975. Akzo must, prior to injection of any fuel oil, take measures to prevent fluid spray outside of the containment structure if the wellhead were to leak fluid under pressure.

2. For the following reasons, EPA is concerned that a wellhead leak, even if initially contained within the concrete containment structure, could escape the containment:
 - a) Since there is no mechanism proposed by Akzo for immediate cessation of injection in the event a leak occurs, the wellhead would continue to be under pressure and fluid would continue to be pumped through the leak. Potentially, this situation could continue for as long as 24 hours without being detected. EPA is concerned that the volume of fluid which could escape the annulus during this period would exceed the volume of the containment structure which would cause a spill which could endanger Seneca Lake. Akzo must take specific measures to reduce this threat prior to any injection of No. 2 fuel oil.
 - b) No provisions have been made for the removal and disposal of precipitation (rain water, snow, etc.) and debris that will fall into, and reduce the effective volume of, the containment structure. This issue must be addressed by Akzo prior to injection of any fuel oil.

In light of the environmental harm that might be caused by injecting fuel oil, EPA urges Akzo to reconsider its decision against using another less environmentally harmful alternative.

If you have any questions, please contact Frank Brock at (212) 264-1547 or Dermott Courtney at (212) 264-6897.

Sincerely,

Richard L. Caspe, P.E.
Director
Water Management Division

cc: Gregory H. Sovas, NYSDEC
Peter Briggs, NYSDEC

bcc: D. Courtney
F. Brock

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